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09/764,247	01/17/2001	Thomas C. Bressoud	1-1-1-1	5905

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EXAMINER

PHILLIPS, HASSAN A

ART UNIT PAPER NUMBER

2151

DATE MAILED: 09/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/764,247

Applicant(s)

BRESSOUD ET AL.

Examiner

Hassan Phillips

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some \* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☒ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

1. This action is in response to amendments received July 22, 2004.

### ***Claim Rejections - 35 USC § 112***

1. After consideration of the amendments made to claim 6, the examiner has withdrawn the rejection made to claim 6 under 35 U.S.C. 112.

### ***Response to Arguments***

1. Applicant's arguments, see page 6, paragraphs 2 and 3, filed July 22, 2004, with respect to the rejection(s) of claim(s) 1, 4, 5, 7, and 12, under 35 U.S.C. 102(e) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of King et al. (hereinafter King), U.S. Patent 6,721,288.

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### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1, 4, 5, 7, 12, are rejected under 35 U.S.C. 103(a) as being unpatentable over Waldo et al. (hereinafter Waldo), U.S. patent 6,016,500, in view of King.

2. In considering claim 1, Waldo teaches a method for maintaining a connection between a server and a client comprising the steps of:

- a) Receiving, storing, and transmitting one or more message elements, (col. 12, lines 59-62, and col. 13, lines 32-35);
- b) Determining whether the server has failed and when the server has failed, restoring the server to a pre-failure connection state using one or more of the stored message elements, (col. 13, lines 35-40).

Although the disclosed method of Waldo shows substantial features of the claimed invention it fails to expressly disclose:

- a) Determining whether to store one or more elements of the message.

Nevertheless, determining whether to store messages sent from a server to a client was well known in the art at the time of the present invention, especially if the client was a mobile device. In a similar field of endeavor, King demonstrates this, and teaches a client server system comprising:

- a) Determining in a mobile client device whether to store a message sent from a server, (col. 12, lines 17-37).

Determining whether or not to store messages, or elements of a message, by a mobile device is done because the memory of the mobile device is typically not large

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enough to store all the elements of a message sent to it. Thus, given the teachings of King, it would have been obvious to one of ordinary skill in the art at the time of the present invention to modify the teachings of Waldo to show determining whether to store one or more elements of the message. This would provide an efficient means storing various messages received by the client by screening the messages in order to determine whether the messages, or elements of the messages, are important enough to be stored 404, King Fig. 4.

3. In considering claim 4, the method of Waldo further teaches:

- a) Determining whether to discard the message, (col. 18, lines 14-17);
- b) Not transmitting, and discarding the message when the message is to be discarded, (col. 18, lines 17-21).

4. In considering claim 5, the method of Waldo further teaches:

- a) Determining whether to modify the message, (col. 18, lines 11-13);
  - b) Modifying one or more elements of the message when the message is to be modified, (col. 18, lines 13-14).
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5. In considering claim 7, it is inherent that the method of Waldo comprises a means for periodically storing a current state of the server and discarding any stored elements that are no longer needed to restore the server to the current state. See col. 13, lines 5-13.

6. In considering claim 12, the method of Waldo discloses a memory in the server for storing the one or more message elements. See col. 10, lines 40-47.

7. Claims 2, 3, 10, 11, 13, are rejected under 35 U.S.C. 103(a) as being unpatentable over Waldo and King, in view of Hickman et al. (hereinafter Hickman), U.S. patent 6,523,130.

8. In considering claim 2, although the disclosed method of Waldo and King shows substantial features of the claimed invention it fails to expressly disclose:

a) Delaying transmission of the message.

Nevertheless, in a similar field of endeavor, Hickman teaches a system having error detection and recovery comprising:

a) Delaying a message until one or more elements of the message are successfully stored in a restored storage server 204, (col. 10, lines 61-67, col. 11, lines 1-6).

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Given the teachings of Hickman, it would have been apparent to one of ordinary skill in the art at the time of the present invention to modify the teachings of Waldo and King to delay transmission of the message if the client/server failed, and transmitting the message after the client/server restored. This would provide an efficient means for transmitting data to/from the client/server in the case of client/server failure. This would

also prevent losing important data while the client/server is being restored, Hickman, col. 10, lines 59-64.

9. In considering claim 3, although the disclosed method of Waldo and King shows substantial features of the claimed invention it fails to expressly disclose:

- b) Delaying transmission of the message until an element of the message is successfully stored.

Nevertheless, in a similar field of endeavor, Hickman teaches a system having error detection and recovery comprising:

- b) Delaying a message until one or more elements of the message are successfully stored in a restored storage server 204, (col. 10, lines 61-67, col. 11, lines 1-6).

Given the teachings of Hickman, it would have been apparent to one of ordinary skill in the art at the time of the present invention to modify the teachings of Waldo and King to delay transmission of the message if the client/server failed, and transmitting the remaining elements of the message after the client/server restored. This would provide an efficient means for transmitting data to/from the client/server in the case of client/server failure. This would also prevent losing important data while the client/server is being restored, Hickman, col. 10, lines 59-64.

10. In considering claim 10, although the disclosed method of Waldo and King shows substantial features of the claimed invention it fails to expressly disclose:

- a) Storing a message element in a log server.

Nevertheless, in a similar field of endeavor, Hickman teaches a system having error detection and recovery comprising:

- a) Storing message elements in a log server 208, (col. 10, lines 51-53).

Given the teachings of Hickman, it would have been apparent to one of ordinary skill in the art at the time of the present invention to modify the teachings of Waldo and King to store one or more of the message elements in a log server. This would facilitate in determining what state the client/server was in before failing, and would further assist in returning the client/server to the proper state once the client/server is restored, Hickman, col. 10, lines 59-61.

11. In considering claim 11, although the disclosed method of Waldo and King shows substantial features of the claimed invention it fails to expressly disclose:

- a) A log server remotely located from the server.

Nevertheless, in a similar field of endeavor, Hickman teaches a system having error detection and recovery comprising:

- a) A log server 208 remotely located from the server, (see fig. 6).

Given the teachings of Hickman, it would have been apparent to one of ordinary skill in the art at the time of the present invention to modify the teachings of Waldo and King to have a log server remotely located from the server. This would facilitate in determining what state the client/server was in before failing, and would further assist in

returning the client/server to the proper state once the client/server is restored,  
Hickman, col. 10, lines 59-61.

12. In considering claim 13, although the disclosed method of Waldo and King shows substantial features of the claimed invention it fails to expressly disclose:

- a) Storing message elements in a secondary server.

Nevertheless, in a similar field of endeavor, Hickman teaches a system having error detection and recovery comprising:

- a) Storing message elements in a secondary server 208, (col. 10, lines 51-53).

Given the teachings of Hickman, it would have been apparent to one of ordinary skill in the art at the time of the present invention to modify the teachings of Waldo and King to store one or more of the message elements in a secondary server. This would facilitate determining what state the client/server was in before failing, and would further assist in returning the client/server to the proper state once the client/server is restored, Hickman, col. 10, lines 59-61.

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13. Claims 6, 14, are rejected under 35 U.S.C. 103(a) as being unpatentable over Waldo and King, in view of Harsch, U.S. patent 6,212,175.

14. In considering claim 6, although the disclosed method of Waldo and King shows substantial features of the claimed invention it fails to expressly disclose:

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- a) Periodically transmitting an outgoing message to maintain a connection until the server is restored.

Nevertheless, in a similar field of endeavor, Harsch teaches a method for maintaining a connection between a client and server comprising:

- a) Periodically transmitting a message 390 to maintain a connection until a mobile unit 66 powers up, (col. 11, lines 66-67, col. 12, lines 1-2).

Given the teachings of Harsch, it would have been apparent to one of ordinary skill in the art at the time of the present invention to modify the teachings of Waldo and King to periodically transmit outgoing messages to maintain a connection until the server is restored. Doing so would ensure the client and server remain connected while the server is being restored, Harsch, col. 11, lines 61-66.

15. In considering claim 14, although the disclosed method of Waldo and King shows substantial features of the claimed invention it fails to expressly disclose:

- a) Periodically transmitting an outgoing message to maintain a connection until the server is restored.

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Nevertheless, in a similar field of endeavor, Harsch teaches a method for maintaining a connection between a client and server comprising:

- a) Periodically transmitting a message 390 to maintain a connection until a mobile unit 66 powers up, (col. 11, lines 66-67, col. 12, lines 1-2).

Given the teachings of Harsch, it would have been apparent to one of ordinary skill in the art at the time of the present invention to modify the teachings of Waldo and

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King to periodically transmit outgoing messages to maintain a connection until the server is restored. Doing so would ensure the client and server remain connected while the server is being restored, Harsch, col. 11, lines 61-66.

16. Claims 8, 9, are rejected under 35 U.S.C. 103(a) as being unpatentable over Waldo and King, in view of Devarakonda et al. (hereinafter Devarakonda), U.S. patent 5,566,297.

17. In considering claim 8, although the disclosed system of Waldo and King shows substantial features of the claimed invention, it fails to expressly disclose:

- a) The message being a protocol segment.

Nevertheless protocol segment messages sent between clients and servers were well known in the art at the time of the present invention. This is exemplified by the methods of Devarakonda, who teaches a method of recovery from server failure comprising:

- a) Protocol segment messages, (col. 2, lines 38-40, also see fig. 3).

Given the teachings of Devarakonda it would have been apparent to one of ordinary skill in the art to modify the teachings of Waldo and King to have the messages be protocol segment messages. This would have provided a well known means of communication between the client and the server, Devarakonda, col. 1, lines 14-21.

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18. In considering claim 9, although the disclosed system of Waldo and King shows substantial features of the claimed invention, it fails to expressly disclose:

- a) Conforming to the Transmission Control Protocol (TCP) standard.

Nevertheless messages conforming to the TCP standard were well known in the art at the time of the present invention. This is exemplified by the methods of Devarakonda, who teaches a method of recovery from server failure comprising:

- a) Conforming to a TCP standard, (col. 2, lines 7-9).

Given the teachings of Devarakonda it would have been apparent to one of ordinary skill in the art to modify the teachings of Waldo and King to have the messages conform to the TCP standard. This would have provided a well known means of communication between the client and the server, Devarakonda, col. 1, lines 14-21.

### ***Conclusion***

1. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hassan Phillips whose telephone number is (571) 272-3940. The examiner can normally be reached on M-F 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on (703) 308-6687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HP/  
9/20/04

  
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PRIMARY EXAMINER